

**EXHIBIT 121**

**Excerpts of the**

**Second Deposition of**

**Dr. Hal J. Singer**

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEVADA

- - -

CUNG LE, NATHAN QUARRY, JON: CIVIL ACTION  
FITCH, BRANDON VERA, LUIS :  
JAVIER VAZQUEZ, and KYLE :  
KLINGSBURY on behalf of :  
themselves an others :  
Similarly situated, :  
Plaintiffs : CASE NO.  
: 2:15-cv-01045-RFB  
vs. : (PAL)  
:  
ZUFFA, LLC d/b/a ULTIMATE :  
FIGHTING CHAMPIONSHIP and :  
UFC, :  
Defendants :

- - -

Tuesday, January 23, 2018  
DAY 2

- - -

Continuation of videotaped  
deposition of HAL J. SINGER, Ph.D., taken  
pursuant to notice, was held at the  
offices of BERGER & MONTAGUE, P.C., 1622  
Locust Street, Philadelphia, PA 19103,  
commencing at 10:19 a.m., on the above  
date, before Lori A. Zabielski, a  
Registered Professional Reporter and  
Notary Public in and for the Commonwealth  
of Pennsylvania.

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<p style="text-align: right;">Page 371</p> <p>1 levels that I thought a Court 2 would deem at least not 3 anticompetitive based on my 4 understanding of precedent in the 5 similar cases. 6 So I think that that's where 7 the zero, 20 and 30 percent come 8 from, let's just be clear. It's 9 not -- it's not from anywhere 10 else. We are trying to find a 11 level of foreclosure that would be 12 deemed not anticompetitive by a 13 Court. 14 So the questions that you 15 asked me in the last five minutes 16 are -- seem like you are looking 17 for an alternative motivation for 18 how I got to zero, 20 and 30 19 percent. I am telling you what 20 got me to the zero, 20 and 30 21 percent, I was trying to come up 22 with levels that would basically 23 give Zuffa -- would shield Zuffa 24 from liability in exclusive</p>	<p style="text-align: right;">Page 373</p> <p>1 the wage effect was from Zuffa taking the 2 foreclosure share from the low digits, 3 low single digits up into the -- up into 4 the 90s, say, over the course of the 5 damages period, for the class period. 6 And I say, okay, let's roll it back, 7 let's see what the relationship was 8 between wage share and foreclosure share 9 and then just roll it back to levels that 10 would -- that would give Zuffa -- that 11 would shield Zuffa from antitrust 12 liability. Okay. 13 And then the next question 14 is, okay, what are -- what are other -- 15 you know, you had asked me during the 16 first deposition, how does Zuffa get 17 there, what would they have to do to 18 their contracts to come into compliance 19 with or to ensure that foreclosure was no 20 higher than 30 percent. And we went 21 through all sorts of different ways that 22 they could restructure their contracts so 23 that it wouldn't -- so that foreclosure 24 levels wouldn't be above 30 percent.</p>
<p style="text-align: right;">Page 372</p> <p>1 dealing case. 2 BY MR. ISAACSON: 3 Q. All right. So I am not here 4 to discuss your motivations about this. 5 I am just here to ask you questions. 6 And my next question is, is 7 there anything in your rebuttal report 8 where you analyze how a but-for world 9 that you have described would achieve a 10 foreclosure rate of 30 percent or lower? 11 A. I don't think so, but the 12 question, again, has the -- has the 13 causality going in the wrong direction. 14 Q. All right. And when you say 15 the causality is going in the wrong 16 direction, by that I am asking you how 17 the but-for world causes a lower 18 foreclosure share. Are you saying the 19 correct causality is how a lower 20 foreclosure share causes the but-for 21 world? 22 A. It's closer. I would say 23 that if what we are trying to do is to -- 24 first, we are trying to figure out what</p>	<p style="text-align: right;">Page 374</p> <p>1 And Dr. Topel says, I want 2 to know more, not just what they'd have 3 to do to come into compliance, but tell 4 me what other elements would look like, 5 would there be -- would there be 6 co-promotion, would there be the 7 right-to-match clause, would there be 8 this and that and the other. 9 And so in this reply report, 10 I am trying to fill in a little more 11 granularity as to what a plausible 12 but-for world would look like that would 13 be consistent with foreclosure shares of 14 zero, 20 and 30 percent. 15 Q. Now, when you say that the 16 but-for world you describe in paragraph 17 198 is a plausible but-for world, are 18 there other plausible but-for worlds in 19 your opinion that would be consistent 20 with foreclosure shares of 30 percent or 21 lower? 22 A. Sure. Remember, in a 23 footnote I say that while co-promotion 24 would be likely based on these proxies,</p>

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1 it's not -- it's certainly not necessary  
2 to engender competitive outcomes so long  
3 as the markets are more open, less  
4 restrictive and rivals get a foothold and  
5 are able to put forward compelling  
6 matches for MMA audiences.

7 Q. Are there -- at this point,  
8 following your rebuttal report, is it  
9 your opinion that there are many ways to  
10 get to a lower foreclosure share that  
11 would constitute an appropriate but-for  
12 world?

13 A. Well, remember, all that  
14 needs to happen to get to a lower  
15 foreclosure share is that Zuffa would  
16 need to change the parameters of its  
17 contracts with fighters in such a way as  
18 to ensure that the cumulative duration of  
19 the restrictions don't take you over some  
20 level that a Court would deem  
21 exclusionary.

22 That's all you need to get  
23 the foreclosure share down. We had  
24 talked about whether 30 months -- 36

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1 months was too long and, you know, what  
2 would be a -- what would be a duration  
3 that would be acceptable to a Court.

4 That, to me, is really the  
5 key element of what you need in a  
6 contract to bring the foreclosure share  
7 down to levels of zero, 20 or 30 percent.  
8 After that, what we are doing here is we  
9 are just filling in other aspects of the  
10 but-for world that would complement or be  
11 consistent with that -- with that  
12 outcome.

13 Q. All right. So in your  
14 opinion, does but-for world have to  
15 include contracts that are -- exclusive  
16 contracts that are no longer than one  
17 year?

18 A. Well, I think we went  
19 through this in the first -- in the first  
20 deposition. But, again, I mean, my  
21 answer is not going to change. It's  
22 going to be -- it's going to depend on  
23 where -- where the Court would draw the  
24 line as to what's considered to be an

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1 exclusionary arrangement.

2 Now, I have tried to inform  
3 the Court based on what I think is the  
4 average career span of a fighter and  
5 that -- and that when we -- when we  
6 figure out how to draw that line, we  
7 ought to take into consideration how much  
8 of a fighter's remaining career span is  
9 left after they sign with Zuffa.

10 But depending on where that  
11 line gets drawn, Zuffa could then  
12 construct its contracts in such a way as  
13 to comply with that -- with that line,  
14 and with an important caveat: So long as  
15 30 percent, say, is tolerated, they  
16 could -- they could carve off 30 percent  
17 or, in fact, more if the market share is  
18 not quite 100 percent. They could carve  
19 off a certain portion of their fighters  
20 and subject them to potentially longer  
21 contracts.

22 So there is not -- there is  
23 not a -- there is not one way to get a  
24 foreclosure share under 30, as we

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1 discussed. There are a lot of ways to  
2 get it down. But these other parameters  
3 that I am informing right now are things  
4 that help fill in what the but-for world  
5 would look like. They are meant to  
6 complement or be consistent with. But  
7 they're -- I think that while we have  
8 been going in circles, these other  
9 parameters, while important, aren't the  
10 levers that are pushing foreclosure down  
11 to 30, 20 or zero percent.

12 Q. Okay. One simple point I  
13 had been wondering about based on the  
14 support, you had told me before that  
15 there is not one way to get foreclosure  
16 share under 30; there are a lot of ways  
17 to get it down.

18 That's still your opinion?

19 A. Oh, sure. I just gave  
20 you -- I just gave you two ways to do it.  
21 One could be across the board, every  
22 single contract contains the same  
23 provision. That would get you down.  
24 Another way to do it would be to do a

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1 carve-out for a certain set of contracts,  
2 but you would have to make sure that  
3 those contracts don't account for too  
4 large of a share of a market.

5 There are lots of ways that  
6 you could restructure the contract, and I  
7 have -- of course, I have opinions as to  
8 how it could be done to come into  
9 compliance with, say, a 30 percent  
10 foreclosure requirement.

11 Q. All right. And at this  
12 point, following your rebuttal report,  
13 you are still, depending on your analysis  
14 about where the Court draws the line as  
15 to what's an exclusionary arrangement.

16 Am I correct about that?

17 MR. CRAMER: Objection to  
18 form.

19 THE WITNESS: I think that  
20 that ultimately would fall to the  
21 fact-finder. I have tried to  
22 inform the decision-making based  
23 on my experience, my reading of  
24 other cases, other economic

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1 articles and, of course, most  
2 importantly, I go back to this,  
3 the average career length of a  
4 fighter. I think that all those  
5 things should inform what the line  
6 should be.

7 I have tried to -- I have  
8 tried to offer what I think would  
9 be a fair number. I have -- in  
10 fact, in this report, I have  
11 pointed to the duration in Zuffa's  
12 contracts when it had less market  
13 power than it does now as what I  
14 think would be a reasonable proxy  
15 for the duration of the contract.

16 BY MR. ISAACSON:

17 Q. All right. And just to make  
18 sure I understand where you are now at  
19 the end of your rebuttal report, if the  
20 Court were to determine that contracts --  
21 exclusive contracts of one year or more  
22 were exclusionary, would that -- if --  
23 would an appropriate but-for world  
24 include one-year contracts or less, plus

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1 some other parameters or some other  
2 possible parameters, as Zuffa said, and  
3 that would result in a foreclosure share  
4 of 30 percent or lower?

5 MR. CRAMER: Objection to  
6 form.

7 THE WITNESS: Well, I think  
8 we are close. I think what I am  
9 getting tripped up on is you said  
10 one year or more would be  
11 exclusionary. And then, of  
12 course, if you did it at one year,  
13 you wouldn't be in compliance.  
14 But how about can we try a  
15 different hypothetical or did  
16 you -- maybe you meant to do that.

17 BY MR. ISAACSON:

18 Q. Well, no. I was not trying  
19 to put significance of 365 days versus  
20 366.

21 But if the Court drew the  
22 line at exclusionary contract of  
23 something that's more than one year and  
24 instead, that a one-year contract or less

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1 was not exclusionary --

2 A. Got it. Got it. Sorry.  
3 Then I didn't hear that the first time,  
4 but I am with you now.

5 Q. Okay. With that assumption,  
6 in your opinion, would an appropriate  
7 but-for world be contracts that were one  
8 year or less in duration, plus some other  
9 potential parameters that you pointed to  
10 in your report and that but-for world  
11 result in foreclosure shares of 30  
12 percent or less?

13 A. Well, it's certainly getting  
14 closer to what I think would be the  
15 appropriate but-for world. It seems like  
16 we could -- we could restructure the  
17 contracts by reducing the duration, such  
18 that when I went back and calculated  
19 foreclosure, it would no longer be in  
20 excess of 30 percent, and I think that  
21 getting the duration below what the  
22 fact-finder deem exclusionary and in  
23 violation of the antitrust laws is a  
24 smart way to go about it.

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1 saying is that the but-for wages and wage  
2 shares that I am estimating are closer to  
3 the fighters' marginal revenue product  
4 than what they are currently being paid.

5 Q. But in your opinion, are the  
6 but-for wages that you are estimating  
7 approximating the marginal revenue  
8 product of the fighters?

9 A. I am getting caught up on  
10 the word "approximating." Can we -- can  
11 we agree on something that's a little  
12 less strong? How about we are -- we are  
13 getting closer to in the but-for world.  
14 The simulation is putting fighters at a  
15 wage share and wage level that is closer  
16 to their marginal revenue product. I am  
17 not -- I am not prepared to say that it  
18 would -- it would approximate or be  
19 exactly equal to 100 percent of the  
20 but-for wages.

21 Q. I need to follow up because  
22 getting closer to could mean a little  
23 closer to or very closer to. So I could  
24 stand in -- at the back of this room and

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1 take one step forward and get closer to  
2 you but still be far away.

3 A. That's fair.

4 Q. The -- is the -- are the  
5 but-for wages -- but-for wages that you  
6 are estimating in your regression, are  
7 those close to or -- let me put it this  
8 way: The but-for wages that you are  
9 estimating in your regression, how close  
10 are they to the marginal revenue product  
11 of the fighters in your opinion?

12 A. I haven't estimated the  
13 marginal revenue products, so to answer  
14 that question, I would have to -- I would  
15 have to engage in a -- in a different  
16 exercise than what I did here.

17 But I -- what I -- what I  
18 can tell you is that when we take the  
19 foreclosure share down to 30 percent, we  
20 are eviscerating a large part of Zuffa's  
21 market power. What I am -- what I am  
22 hesitant -- what I am hesitating on and  
23 what I am reluctant to say is that the 30  
24 percent foreclosure completely

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1 eviscerates Zuffa's market power to the  
2 point that Zuffa is forced to pay  
3 fighters equal to their marginal revenue  
4 product. That's -- that's quite a  
5 statement.

6 And I want to allow for the  
7 possibility that with 30 percent  
8 foreclosure share, Zuffa could still have  
9 some, not as much, but some buying power,  
10 such that it could push wages below  
11 marginal revenue product, just not to the  
12 extent that it's doing today.

13 Q. Now, you said you haven't  
14 estimated the marginal revenue product of  
15 the fighters. If you could estimate  
16 those, would that -- would you then use  
17 that as the dependent -- a dependent  
18 variable in your impact regression?

19 A. No. I intentionally did not  
20 estimate the marginal revenue product  
21 because it would be one unnecessary step  
22 in the process, and I didn't want to  
23 introduce an unnecessary step. I did  
24 what was needed to be done to simulate

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1 but-for wage shares.

2 Q. In your opinion, does the  
3 individual marginal revenue product vary  
4 among fighters?

5 A. It could as a matter of  
6 theory, yes.

7 Q. Beyond theory, based on the  
8 investigation that you have done in this  
9 case, in your opinion, does it actually  
10 vary amongst the fighters?

11 A. Most likely, yes, based on  
12 my investigation, I am thinking in  
13 particular of a regression in which I  
14 estimated the relationship between event  
15 revenues and the rank of the highest  
16 ranked fighter featured, and it seems to  
17 me that so long as rank is capturing  
18 productivity, it appears to be that if  
19 you put on a fight with a high productive  
20 fighter, all things equal, you are going  
21 to generate higher event revenue.

22 So that tells me there is  
23 going to be variation among the fighters  
24 with respect to their ability, basically



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1 their revenue generation capabilities.

2 Q. And assuming the status quo,  
3 current Zuffa contracts and practices, is  
4 there a relationship in your opinion  
5 between fighters' marginal revenue  
6 product and their individual  
7 compensation?

8 MR. CRAMER: Do you mean in  
9 the current world?

10 MR. ISAACSON: Yes.

11 THE WITNESS: Yes, I think  
12 in the current world, all things  
13 equal, the more productive you  
14 are, the higher you get paid.

15 BY MR. ISAACSON:

16 Q. And I think you have said  
17 this, but I will just confirm. You do  
18 think that what you would describe as a  
19 competitive world, there would be a  
20 relationship between marginal revenue --  
21 individual marginal revenue product and  
22 individual compensation?

23 A. Well, there is always a  
24 relationship, right? There is a

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1 relationship in the actual world, there  
2 is a relationship in the but-for world.  
3 That's Labor Theory 101. The -- what we  
4 are trying to figure out is how the  
5 challenged conduct affected or thwarted  
6 that relationship.

7 Q. Okay. And you have said  
8 that event revenue is a proxy for the  
9 collective marginal revenue product of  
10 the fighters of the event.

11 Is there a way of looking at  
12 event revenue to use that as proxy for  
13 individual fighter marginal revenue  
14 product?

15 A. Well, I think, again, the  
16 way that I have constructed my impact  
17 regressions, I have -- I have used the  
18 individual compensation relative to the  
19 event revenue as my dependent variable.  
20 So in a sense, I am trying to decompose  
21 event revenue that way.

22 Q. All right. And when you say  
23 you use individual compensation relative  
24 to event revenue, as I understand it, you

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1 are looking -- some fighters are paid  
2 more, some are paid less, and you are  
3 using their payments relative to one  
4 another to see -- and comparing that to  
5 event revenue?

6 A. I wouldn't -- I wouldn't  
7 quite put it that way.

8 Q. Let me try to put it this  
9 way: The -- I am trying to get something  
10 simple here.

11 A. Okay.

12 Q. You have someone who is  
13 being paid a million dollars for a fight  
14 and someone who is being paid \$50,000 for  
15 a fight.

16 A. Got it.

17 Q. You are assuming that the  
18 person being paid \$50,000 is making --  
19 has a lower marginal revenue product than  
20 the person being paid a million dollars?

21 MR. CRAMER: Objection to  
22 form.

23 THE WITNESS: I am not  
24 assuming anything. Just to make

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1 your hypothetical concrete, let's  
2 assume they both fought in the  
3 same fight.

4 MR. ISAACSON: Same event.

5 THE WITNESS: Okay. You  
6 didn't say that, but I am trying  
7 to --

8 MR. ISAACSON: Right.

9 THE WITNESS: Right.

10 Let's assume that they both  
11 fought in the same event. What my  
12 model is trying to do, it's not  
13 assuming anything. It's letting  
14 the data explain to us the  
15 relationship between the fighters'  
16 attributes and how much of the  
17 event revenue that fighter was  
18 able to take home as compensation.

19 BY MR. ISAACSON:

20 Q. All right. But for your  
21 dependent variable, the -- you are  
22 relying on the -- for your dependent  
23 variable, the person earning \$50,000  
24 would be making less of a contribution

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1 market, estimates the additional live  
2 events that would have taken place if you  
3 eliminated the challenged conduct?

4 A. Events that occur -- that  
5 are -- that are implicated or occur  
6 within that ranked definition. With  
7 that -- with that caveat, yes, we are  
8 comparing -- we are just taking a trend  
9 of events that fall within a certain  
10 market definition and comparing it to  
11 what actually happened. And no matter  
12 what definition I use, it appears as if  
13 there is a drop-off in industry events  
14 despite the fact that Zuffa's event are  
15 rising.

16 Q. All right. And so within  
17 the rank -- now, absent the challenged  
18 conduct -- we talked about absent the  
19 challenged conduct to some -- for quite a  
20 while for your regressions and impact  
21 analysis. I don't want to go back over  
22 that.

23 Is your but-for world of the  
24 absence of challenged conduct for

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1 purposes of Figure 4B the same world  
2 where you have a foreclosure percentage  
3 of 30 percent or below?

4 A. I think it's the same  
5 but-for world, but I am not -- I am not  
6 using that same regression model as the  
7 tool or the mechanism that allows me to  
8 make this projection. I am simply taking  
9 a trend of output at the industry level  
10 and projecting it forward from 2010.

11 Q. All right. So in Figure 4B,  
12 using the ranked definition, you are  
13 estimating how many additional bouts  
14 would have taken place from 2010 to 2016,  
15 assuming that there was foreclosure of  
16 30 percent or less?

17 A. Well, that last part of the  
18 question doesn't completely make sense to  
19 me. These are -- there is not a specific  
20 but-for foreclosure share that's lurking  
21 in the background. I don't have to  
22 specify but-for foreclosure share to  
23 calculate an output factor to demonstrate  
24 an output effect in this analysis.

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1 Q. All right. Let me try it  
2 this way: In Figure 4B, using the ranked  
3 definition, you are estimating how many  
4 additional bouts would have taken place  
5 from 2010 to 2016, assuming the same  
6 but-for world that would cause a  
7 foreclosure share of 30 percent or less?

8 A. So are you asking me what  
9 the implied reduction in output was in  
10 the ranked market?

11 Q. I am just trying to  
12 understand your but-for world.

13 A. Oh, the but-for world is --  
14 the but-for world doesn't vary as we move  
15 across my analyses. I am -- I am just  
16 telling you we don't -- this analysis  
17 that we do here, as you may or may not  
18 know, is -- does not depend on my  
19 specifying a but-for foreclosure level.  
20 This is a trend analysis. This is a  
21 before/after analysis.

22 Q. I realize that. But the --  
23 your but-for world in Figure 4B is the  
24 same but-for world that generates a

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1 foreclosure percentage of 30 percent or  
2 less?

3 A. I think that's fair.

4 Q. Okay. And using your trend  
5 analysis, if I am reading this right, in  
6 2016, for Zuffa events, which there were  
7 approximately a little less than 700 in  
8 the actual world, the -- in your  
9 estimation -- no, actually you are not  
10 estimating the Zuffa event.

11 So let me -- the total event  
12 account. The total MMA event account --  
13 actually, that's kind of confusing.

14 Why is the total MMA account  
15 less than the Zuffa account?

16 A. The Zuffa numbers are on  
17 the -- are on the left-hand side. If you  
18 want to read --

19 Q. I am looking at the blue  
20 line and the green line.

21 A. Mine don't have  
22 color-coding, but --

23 MR. CRAMER: Here.

24 THE WITNESS: Okay. If you



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1 want to read off the Zuffa event  
2 count, you need to go to the axis  
3 on the left-hand side.

4 BY MR. ISAACSON:

5 Q. Yes, I understand that.

6 But -- oh, but the --

7 A. And if you want to read off  
8 the total or the non-Zuffa, you have to  
9 go get the relevant curve and then go to  
10 the right axis, the second axis.

11 Q. So -- all right. So the  
12 Zuffa count would be 40-some. That's  
13 right, because you are not going to have  
14 hundreds of those. And for the green --  
15 for the total, you are going to have a  
16 little over 600?

17 A. Which part of the -- so I  
18 am -- I am following the green. Which  
19 part of the green line -- oh, by 2016,  
20 you're right --

21 Q. 2016.

22 A. -- that in the actual world,  
23 what this is telling us is that there  
24 were somewhere between 600 and, say, 700

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1 events that featured someone in the  
2 ranked definition, which is fairly broad.  
3 Remember, this is anybody in the top 650.

4 Q. Right. So -- and in your  
5 estimation, in the same world it gets you  
6 a 30 percent foreclosure share or less,  
7 the amount of total MMA event in 2016  
8 would rise from -- some amount over 600  
9 to a little over 1,800?

10 A. If you have -- if you  
11 defined your market so broadly as to  
12 include anyone in the ranked definition,  
13 you have to recall, these are -- these  
14 are going to be events that feature  
15 fighters who are relatively obscure in  
16 MMA.

17 I think there is a reason  
18 why I didn't use the same kind of A/B  
19 convention in this figure as I did for  
20 4A, in part, because I think the ranked  
21 definition is likely too broad to get a  
22 reliable estimation of the output effect  
23 here. I think -- I think that I would  
24 point you to more realistic market

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1 definitions.

2 Q. Okay. But am I right that  
3 for the ranked definition which you are  
4 projecting as an increase in bouts from  
5 over 600 to a little over 1,800?

6 A. What this graph shows is  
7 that had the trend from 2001 --

8 Q. I am sorry. That was for  
9 2016.

10 A. What this shows is that had  
11 the trend in total events in this market  
12 definition, the ranked definition,  
13 persisted, the trend that went from 2001  
14 to 2010, had it persisted, then by 2016,  
15 total events would be somewhere on the  
16 order of 1,800.

17 Q. All right. And based on  
18 that, you reached the opinion that there  
19 would be over 1,800 events in the ranked  
20 definition in the year 2016 in the  
21 absence of the challenged conduct?

22 A. I don't think that that's  
23 the opinion that I reached. I think that  
24 I am trying to be complete with respect

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1 to every plausible market definition to  
2 show that output was restricted here.

3 Q. All right. Now, let me see  
4 if I can understand -- do you have an  
5 opinion as to how many additional bouts  
6 there would be within the ranked  
7 definition in 2016 in the absence of the  
8 challenged conduct?

9 A. I don't think that I have  
10 ever said that I am predicting that  
11 exactly 1,800 events would have occurred.  
12 I think that what I am saying is that had  
13 the trend persisted, the trend from 2001  
14 to 2010, then one would predict that by  
15 2016, this industry would have grown to  
16 something on the order of 1,800 events.

17 Q. All right. But based on  
18 that trend, are you reaching any opinions  
19 about how many events would have taken  
20 place within the ranked definition in  
21 2016 in the absence of the challenged  
22 conduct?

23 A. I think the opinion that I  
24 am willing to make or take based on this

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1 chart in conjunction with all the other  
2 charts that I have is that there was an  
3 output effect and that revenue --  
4 industry output fell no matter -- from  
5 2010, no matter how you define the  
6 relative input market

7 Q. All right. But are you able  
8 to quantify that output effect within the  
9 ranked definition?

10 A. One could quantify it if one  
11 were truly interested in getting a  
12 number, but I don't know -- I don't know  
13 what the precise number gives you above  
14 and beyond that inference that can be  
15 drawn by saying that it fell with respect  
16 to every way you define the market.

17 Q. Have you quantified an  
18 output effect within the ranked  
19 definition of total events from the -- by  
20 eliminating the challenged conduct?

21 MR. CRAMER: Asked and  
22 answered.

23 THE WITNESS: I don't think  
24 that I have -- I have quantified

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1 it.

2 BY MR. ISAACSON:

3 Q. All right. Let me go to the  
4 tracked definition.

5 A. Okay.

6 Q. So here, for the number of  
7 bouts, I just look at the left axis; is  
8 that correct?

9 A. Correct.

10 Q. Okay. And help me  
11 understand the brackets that are the  
12 A and B.

13 A. Sure.

14 Q. So there is the dotted line  
15 that goes to the top of the B bracket.  
16 Do you see that?

17 A. Yes.

18 Q. Okay. The -- is that a  
19 combination of the Zuffa event and  
20 non-Zuffa events reflected in the blue  
21 line and the red line?

22 A. No. The dotted red is the  
23 legend that tells you it's the but-for  
24 non-Zuffa event count. So all we are

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1 doing is we first plot the non-Zuffa  
2 event account, which is the red line,  
3 right, through 2010, and then we -- and  
4 then we fit a trend line from 2001 to  
5 2010 and we extrapolate forward and we  
6 say of that trend had persisted, then  
7 non-Zuffa events would have continued  
8 increasing and would have -- would have  
9 reached a certain level by 2016.

10 Q. All right. So in Figure 4A,  
11 the red dotted line is your trend line  
12 for non-Zuffa events; is that correct?

13 A. Fit -- yes. But  
14 importantly, fit from 2001 to 2010 only.

15 Q. By "fit," meaning you are  
16 projecting the trend for 2010 through  
17 2016 by the trend prior to 2010?

18 A. That's fairly close. We fit  
19 the trend with data from '01 to 2010, and  
20 then we project forward through 2016.

21 Q. All right. And based on  
22 that trend analysis -- well, first of  
23 all, in 2016, there is -- for non-Zuffa  
24 events, there is -- it looks like there

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1 is approximately 20 events?

2 A. In the actual world, yes,  
3 2016, it looks like there were about 20  
4 non-Zuffa events that are in the tracked  
5 definition.

6 Q. All right. And in the  
7 but-for world, there is a little over 40  
8 events?

9 A. For non-Zuffa, correct.

10 Q. For non-Zuffa?

11 A. Correct.

12 Q. So is it your opinion, based  
13 on the trend analysis in Figure 4A, that  
14 for the tracked definition, that in the  
15 absence of the challenged conduct, the  
16 number of non-Zuffa events would have at  
17 least doubled in 2016?

18 A. I think my opinion is that  
19 there is evidence here of an output  
20 effect, of output suppression. That --  
21 that's my opinion. Whether I am able to  
22 quantify that to any reasonable degree is  
23 a related question, and, of course, my  
24 best estimate, if you insist, would be

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1 Q. All right.  
 2 MR. ISAACSON: Thank you. I  
 3 don't have any more questions.  
 4 MR. CRAMER: Very good.  
 5 THE VIDEOGRAPHER: Okay.  
 6 The time is 5:12 p.m. This is the  
 7 end of Dr. Hal Singer's  
 8 deposition. We are going off the  
 9 record.

10 - - -  
 11 (The deposition concluded at  
 12 5:12 p.m.)  
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# CERTIFICATE

1  
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 3  
 4 I HEREBY CERTIFY that the  
 5 witness was duly sworn by me and that  
 6 the deposition is a true record of  
 7 the testimony given by the witness.  
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13 \_\_\_\_\_  
 14 Lori A. Zabielski  
 15 Registered Professional Reporter  
 16 CaseViewNet Reporter  
 17 Dated: January 24, 2018  
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 20  
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23 (The foregoing certification  
 24 of this transcript does not apply to any  
 reproduction of the same by any means,  
 unless under the direct control and/or  
 supervision of the certifying reporter.)

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# INSTRUCTIONS TO WITNESS

1  
 2  
 3 Please read your deposition over  
 4 carefully and make any necessary  
 5 corrections. You should state the reason  
 6 in the appropriate space on the errata  
 7 sheet for any corrections that are made.

8 After doing so, please sign the  
 9 errata sheet and date it.

10 You are signing same subject to the  
 11 changes you have noted on the errata  
 12 sheet, which will be attached to your  
 13 deposition.

14 It is imperative that you return  
 15 the original errata sheet to the deposing  
 16 attorney within thirty (30) days of  
 17 receipt of the deposition transcript by  
 18 you. If you fail to do so, the  
 19 deposition transcript may be deemed to be  
 20 accurate and may be used in court.  
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# ERRATA

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 3  
 4 PAGE LINE CHANGE

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